Joint Statement by 80 Rutherford Discovery Fellows Denouncing the Minister's Decision to Cut Humanities, Social Science, and Fundamental Science Funding

SUMMARY

As a collective of leading researchers, we are denouncing the damaging changes to the Marsden and Catalyst funds announced on 4 December. We request that the Honourable Judith Collins KC, the Minister for Science, Innovation, and Technology:

- Reinstate the Humanities and Social Sciences Marsden Fund panels.
- Return to the previous terms of reference for the Marsden Fund, including removing the requirement for half of the funded projects to demonstrate economic benefits to Aotearoa New Zealand.
- Restore the availability of the Catalyst Fund to Humanities and Social Sciences projects.
- Ensure that future research reform is evidence-based, aligned with international best practice, and developed through robust consultation with diverse groups of academics, scientists, and researchers.

The recent changes will undermine our capacity to lead globally-relevant research innovations, by cutting discovery capacity – 'blue skies' studies and fundamental science research, by which the most influential new innovations are made – and crippling research in humanities and social sciences. The proposed changes will harm New Zealand in an environment when we are already behind most OECD countries in funding research.

We write this letter as 80 current and former Rutherford Discovery Fellows to engage in a future-focused discussion about how to further Aotearoa, our people, our society, and our economy through wide-ranging research, science, innovation and technology.

We call on the Minister to reverse the changes, and base any future changes to our research system on evidence informed by data and consultation.

In this letter we outline our five key concerns with the changes:

- 1. The changes fail to recognise the value of the Humanities and Social Sciences (HASS).
- 2. The changes limit funding sources for 'blue skies' and fundamental science research.
- 3. There are now severely limited opportunities for dedicated funding for HASS researchers in New Zealand, placing us behind most OECD countries and out of step with international best practice.

- 4. The decision undermines the production of Māori knowledge, capacity and capability building, which is a breach of Te Tiriti o Waitangi/The Treaty of Waitangi.
- 5. The decision represents political interference with the research process and creates further uncertainty for researchers.

FULL STATEMENT

Who we are

We are past and present Rutherford Discovery Fellows working across a range of disciplines and career stages. These fellowships were established to support and retain excellence in the broad spectrum of academic research in Aotearoa, particularly to support the development of future academic leaders across all fields of research.

As recipients of research funding from the NZ Government, we have a responsibility to advocate for a research funding system that supports the local production of knowledge for the public good, and for the benefit of future generations.

The Rutherford Discovery Fellowships take their name from Ernest Rutherford, "the father of nuclear physics", whose portrait appears on our \$100 note as one of the most impactful New Zealanders of all time. His pioneering blue-skies work on the fundamental structure of atoms was unlikely to have been seen as having "real impact on our economy".

Background to the changes

On 4 December 2024 the Minister of Science, Innovation and Technology released changes to the Investment Plan and Terms of Reference for the Marsden Fund and the Catalyst Fund.

These included:

- Abolishing the Humanities and Social Sciences Marsden Fund panels,
- Changing the Marsden Fund terms of reference so 50 per cent of funds are awarded to work that can demonstrate economic benefits to New Zealand,
- Updating the priority research areas of the Catalyst Fund to focus funding on 'clear growth areas of quantum technology, health, biotechnology, artificial intelligence, space, and Antarctic research'.

OUR KEY CONCERNS WITH THE CHANGES

1. The changes fail to recognise the value of the Humanities and Social Sciences (HASS).

With the removal of the HASS panels, the New Zealand Government fails to recognise the diverse contributions of the HASS. As acknowledged globally, HASS research is critical to advancing issues of fairness, equity and wellbeing in society, both through standalone HASS disciplines (like public health, English, Māori studies, developmental psychology, history, philosophy, and political science) and as a pathway to impact for biophysical science.

Specifically, as 'critic and conscience of society', HASS researchers play a critical role in developing an evidence base around public good concerns related to the relationship between science, law, society and economy, including research on social cohesion, democracy, wellbeing, and the rule of law (which the Attorney General has an obligation to uphold).

Further, many research projects funded by the HASS panels are likely to have economic impact over the medium to long term. In the 2024 round, for example, projects included work on the hidden child care struggles of parents working in a 24/7 economy, and generating crucial evidence for policy making aimed at boosting economic growth and supporting the economic wellbeing of Aotearoa. As discussed later, this will also have impacts on the university rankings, international student numbers, and our ability to attract and retain top talent.

2. The changes limit funding sources for 'blue skies' and fundamental science research.

The Marsden fund provides an opportunity for our top scientists to engage in 'blue skies' thinking that leads to scholarly breakthroughs, theory development, and new discoveries. The requirement that approximately 50% of funds go towards supporting proposals with explicit economic benefits to New Zealand, an objective already served by the threefold-larger MBIE Endeavour fund, effectively means a 50% cut in fundamental science funding.

Fundamental science enables foundational discoveries to emerge and provides the knowledge underpinning applied science. These discoveries may be about the way the world works, which alerts society to the threats of future changes and helps us predict, prevent, diagnose and treat ongoing and emerging issues. Our country has a proud history of fundamental science research that has led to major impacts further down the line. In a world that is changing at rates we have not experienced in human history, no one knows what research will become important in the future.

'Blue skies' scientific discoveries have a long history of being the precursors to economically beneficial technological advancements or improving the quality of life of current and future generations. Such research can have indirect and intangible economic benefits: for example, conservation biology benefits our

tourism industry by maintaining healthy ecosystems, which attract visitors and support local economies.

Independent evaluation of Marsden funding indicates that reducing blue skies funding in favour of near-term economic priorities will undermine economic benefits to New Zealand.¹ Narrowing the funding sources for science to only that which immediately focuses on economic benefits disproportionately weights short-term over long-term prosperity.

3. There are now severely limited opportunities for dedicated funding for HASS researchers in New Zealand, placing us behind most OECD countries and out of step with international best practice.

Global calls to action about the most pressing and existential threats facing human society are demanding interdisciplinary knowledge mobilisation, including the key contribution of HASS disciplines and plural knowledge systems (including mātauranga and tikanga Māori) to impacts on society and economy.²

This includes research on complex societal challenges related to climate change, technology driven disruption, biodiversity and ecological breakdown, declining wellbeing and shifting societal norms, environmental overshoot, political polarisation, global conflict, and the Sustainable Development Goals.

The Marsden Fund has been the main source of funding in New Zealand for HASS research that specifically focuses on the critical social and political issues facing Aotearoa, and human society and culture more broadly. There are now severely limited opportunities for dedicated funding options for HASS research in Aotearoa. Defunding HASS will have impacts that reverberate through the research and innovation system for decades to come.

The ability to explore fundamental questions about social issues, human experiences, cultural processes, and philosophical and artistic perspectives, alongside fundamental science questions, has given our researchers the space to develop careers of international renown, making them competitive for international funds.

With the recent EU-New Zealand free trade deal, our research community has become eligible for Horizon Europe funding. Much of what has made us competitive for these funds has been developed through Marsden funding. The

¹ SeeL Motu, 'The effect of public funding on research output: The New Zealand Marsden Fund' https://www.motu.nz/assets/Documents/our-work/productivity-and-innovation/science-and-innovation-policy/Marsden-Fund-Research-execsummary.pdf

² Including those by the <u>International Science Council</u>. See also the recent open letter: "Strengthening Social Science-focused Energy Research in Horizon Europe and its Successor Research"

removal of HASS funding will cause damage to New Zealand's reputation as a global thought leader.

The limited funding sources for 'blue skies' or fundamental science, and the removal of funding options for HASS research have wide reaching consequences.

For all of us, HASS scholars and STEM scientists alike, our desire to grow the next generation and build skills in junior scholars and students is key to our leadership.

The changes will further impair our ability to attract top talent from overseas, including those that produce knowledge that leads to economic gains. Research grants often include postgraduate scholarships, postdoctoral fellowships, and funding for fieldwork: when these are reduced the quality of the whole university system is affected.

Combined with harm to university rankings from the loss of blue-skies research, these changes will reduce our chances of education continuing to be our fifth largest export. The reduced rankings and research performance metrics over time, reduces our global competitiveness to bring further international students, world-class researchers, and funding to our shores.

Fewer top researchers creates a wider loss to society and the economy. Through our research service roles, we are actively engaged with policy development, entrepreneurship, engagement and outreach, advice and capability building, mentoring and assessing, and monitoring and reporting across the public, community, hapū and iwi, industry, non-for-profit, and international sectors.

The diverse skills we build in others has immense value. These students go on to roles across businesses and industry, the public sector, and indeed, even to become members of parliament and ministers.

4. The decision undermines the production of Māori knowledge, capacity and capability building, which is a breach of Te Tiriti o Waitangi/ The Treaty of Waitangi.

The Marsden fund has supported world leading projects in Indigenous research, and internationally renowned Indigenous researchers.

Māori knowledge is a strategic asset that provides an important point of difference in international research and science. Over the past 30 years of the Marsden fund, many Māori-led and Māori-focused projects have been funded that have led to novel knowledge, policy impact, international renown, and innovation in science.

The HASS panels and 'blue skies' focused science funding have provided opportunities for research relevant to Māori communities. For example, in 2024, 65% of the funded projects from HASS panels aimed to explore critical questions leading to the production of Māori knowledge. As noted in the leading journal <u>Science</u>: "This year, Māori made up 13% of all Marsden-funded investigators. Take away the humanities and social sciences panels, and this drops to 5.5%. 'This decision defunds Māori research and researchers by stealth'".

The funding has helped to build research capacity and capability for Māori researchers, and within Māori communities, hapū, and iwi. Māori research in HASS has a track record of supporting new scientific and technological innovation, sustainable industries, and workforce productivity. HASS research is critical to ensuring that Māori benefit equitably from New Zealand's investment in research and development and provides broader benefits in terms of an equitable and diverse research culture that reflects multiple lines of evidence and ways of knowing.

Many universities and research institutions aim to uphold Te Tiriti o Waitangi / The Treaty of Waitangi in their policies and strategic plans. These funding cuts will impact their ability to do this through directing funding away from Māori researchers and the faculties that support them.³ Increasingly, this research funding supports researchers employed in Wānanga, Māori community organisations, iwi-owned entities, or Māori small businesses. These funding cuts will affect their ability to operate.

These funding changes also follow the broader political context: political interference with the work of the courts, government departments, Universities, CRIs, Schools, and funding bodies attempting in good faith to uphold and act in accordance with Te Tiriti o Waitangi and recognise the normative value and function of tikanga and mātauranga Māori.

5. The decision represents political interference with the research process and creates further uncertainty for researchers.

A major obstacle to Aotearoa achieving the economic success that comes from international research and innovation standing is the ad hoc and uncertain nature of funding arrangements, made even less certain by the influence of politics on research funding decisions. For example, changes to the Catalyst investment signals for 2024 within the funding round indicate a lack of procedural fairness. This uncertainty stifles innovation and, as emphasised above, provokes many of our brightest researchers to leave New Zealand.

A key change to the Marsden Terms of Reference is the removal of the line: "The research is not subject to government's socio-economic priorities." These funding changes can be seen as the latest in a series of concerted efforts by politicians to

³ Ngā Pae o te Māramatanga 'Cuts to Humanities and Social Sciences Research will Impact Māori Most', https://www.maramatanga.ac.nz/node/2167

control the production of knowledge in Aotearoa, and types of knowledge held by the public, by undermining structural support for research that could highlight public concerns of unfairness, injustice, inequity and inefficiency. Universities must be supported to act as the 'critic and conscience of society' under section 268 of the Education and Training Act 2020.

There remains significant uncertainty about the future of the research system as we wait for the outcome of the Science System review being led by Sir Peter Gluckman, and while the office of the Prime Minister's Chief Science Adviser has remained vacant for 5 months. There is a significant hole in the mission-led research funding system following the recent conclusion of the National Science Challenges, which themselves provided a significant and valuable support and outlet for HASS research.

With these new research funding cuts, and with the research funding landscape in flux, there is substantial uncertainty for our researchers. This uncertainty stifles planning, creativity, discoveries, and performance of the sector as a whole, and contributes to the exodus of our talent to overseas institutions.

CONCLUSIONS

We, as a collective of past and present Rutherford Discovery Fellows, encourage the Minister for Science, Innovation, and Technology to reconsider their recent decision. Specifically, we request that the Minister:

- Reinstate the Humanities and Social Sciences Marsden Fund panels.
- Return to the previous terms of reference for the Marsden Fund, including removing the requirement for half of the funded projects to demonstrate economic benefits to Aotearoa New Zealand.
- Restore the availability of the Catalyst Fund to Humanities and Social Sciences projects.
- Ensure that future research reform is evidence-based, aligned with international best practice, and developed through robust consultation with diverse groups of academics, scientists, and researchers.

SIGNATORIES

We make this statement in our personal capacities and don't purport to represent the views of our institutions or funders.

- 1. Tim Angeli-Gordon Rutherford Discovery Fellow, 2018
- 2. Patrick Savage Rutherford Discovery Fellow, 2022
- 3. Christopher Cornwall Rutherford Discovery Fellow, 2017
- 4. Emma Sharp Rutherford Discovery Fellow, 2023
- 5. Krushil Watene (Ngāti Manu, Te Hikutu, Ngāti Whātua Ōrākei, Tonga) Rutherford Discovery Fellow, 2018
- 6. Jonathan Tonkin Rutherford Discovery Fellow, 2018

- 7. Lara Greaves (Ngāpuhi) Rutherford Discovery Fellow, 2023
- 8. Elizabeth Macpherson Rutherford Discovery Fellow, 2023
- 9. Baptiste Auguié Rutherford Discovery Fellow, 2017
- 10. Yvette Perrott Rutherford Discovery Fellow, 2017
- 11. Ceridwen Fraser Rutherford Discovery Fellow, 2018
- 12. Ágnes Szabó Rutherford Discovery Fellow, 2019
- 13. Jonathan Squire Rutherford Discovery Fellow, 2018
- 14. John Reynolds Rutherford Discovery Fellow, 2010
- 15. Nathan Kenny (Te Ātiawa, Ngāi Tahu) Rutherford Discovery Fellow, 2020
- 16. Suetonia Green Rutherford Discovery Fellow 2014
- 17. Paul Gardner Rutherford Discovery Fellow, 2010
- 18. Volker Nock Rutherford Discovery Fellow, 2019
- 19. Jodie Hunter Rutherford Discovery Fellow, 2020
- 20. Olivia Harrison Rutherford Discovery Fellow, 2019
- 21. Louise Bicknell Rutherford Discovery Fellow, 2014
- 22. Jemma Geoghegan Rutherford Discovery Fellow, 2020
- 23. Angela Wanhalla (Kāi Tahu, Kāti Māmoe) Rutherford Discovery Fellow, 2013
- 24. Jenny Malmström Rutherford Discovery Fellow, 2016
- 25. Amanda Black Rutherford Discovery Fellow, 2021
- 26. Holly Winton Rutherford Discovery Fellow, 2022
- 27. Michele Bannister Rutherford Discovery Fellow, 2020
- 28. Jay Marlowe Rutherford Discovery Fellow, 2018
- 29. Melanie Ooi Rutherford Discovery Fellow, 2019
- 30. Geoff Willmott Rutherford Discovery Fellow, 2012
- 31. Lisa Te Morenga (Ngāpuhi, Ngāti Whātua, Te Rarawa), Rutherford Discovery Fellow, 2018
- 32. Tom Logan Rutherford Discovery Fellow, 2023
- 33. Alana Alexander (Te Hikutū: Ngāpuhi, Pākehā), Rutherford Discovery Fellow, 2021
- 34. Adele Williamson Rutherford Discovery Fellow, 2020
- 35. Jason Tylianakis Rutherford Discovery Fellow, 2010
- 36. Rosie Brown Rutherford Discovery Fellow, 2023
- 37. Lara Shepherd Rutherford Discovery Fellow, 2012
- 38. Rebecca Lawton Rutherford Discovery Fellow 2023
- 39. Libby Liggins Rutherford Discovery Fellow, 2020
- 40. Ruggiero Lovreglio Rutherford Discovery Fellow, 2022
- 41. Julie Deslippe Rutherford Discovery Fellow, 2022
- 42. Melinda Webber (Ngāpuhi, Ngāti Kahu, Ngāti Whakaue) Rutherford Discovery Fellow, 2017
- 43. Jaimie Veale Rutherford Discovery Fellow, 2020
- 44. Jennifer Hay Rutherford Discovery Fellow, 2010
- 45. David Hayman Rutherford Discovery Fellow, 2017
- 46. Dillon Mayhew Rutherford Discovery Fellow, 2013
- 47. Cate Macinnis-Ng Rutherford Discovery Fellow, 2015
- 48. Peter Fineran Rutherford Discovery Fellow, 2011
- 49. Alys Clark Rutherford Discovery Fellow, 2015
- 50. Calum Chamberlain Rutherford Discovery Fellow, 2021
- 51. Craig Radford Rutherford Discovery Fellow, 2013
- 52. Nancy Bertler Rutherford Discovery Fellow, 2011
- 53. Kelly Dombroski Rutherford Discovery Fellow, 2021
- 54. Francis L. Collins Rutherford Discovery Fellow, 2014
- 55. Barbara Anderson Rutherford Discovery Fellow, 2012

- 56. Annette Henderson Rutherford Discovery Fellow, 2015
- 57. Rachael Shaw Rutherford Discovery Fellow, 2016
- 58. Kelly Blincoe Rutherford Discovery Fellow, 2022
- 59. Ashton Bradley Rutherford Discovery Fellow, 2010
- 60. Clemency Montelle Rutherford Discovery Fellow 2012
- 61. Justin Rustenhoven Rutherford Discovery Fellow 2021
- 62. Robert Mckay Rutherford Discovery Fellow, 2013
- 63. Quentin Atkinson Rutherford Discovery Fellow, 2011
- 64. Adam Hartland Rutherford Discovery Fellow, 2016
- 65. Simon Barker Rutherford Discovery Fellow, 2023
- 66. Nicole Roughan Rutherford Discovery Fellow, 2016
- 67. Alice Theadom Rutherford Discovery Fellow, 2018
- 68. Guy Fiti Sinclair Rutherford Discovery Fellow, 2023
- 69. Elizabeth Stanley Rutherford Discovery Fellow 2013
- 70. Kimberley O'Sullivan Rutherford Discovery Fellow 2023
- 71. J. David Aguirre Rutherford Discovery Fellow 2019
- 72. Katie Fitzpatrick Rutherford Discovery Fellow, 2014
- 73. Nicole Moreham Rutherford Discovery Fellow, 2011
- 74. Siautu Alefaio Rutherford Discovery Fellow, 2020
- 75. Jenni Stanley Rutherford Discovery Fellow, 2020
- 76. Peter Mace Rutherford Discovery Fellow, 2012
- 77. Noam Greenberg Rutherford Discovery Fellow, 2010
- 78. Nathaniel Davis Rutherford Discovery Fellow, 2020
- 79. Mathew Anker Rutherford Discovery Fellow, 2022
- 80. Hannah Waddington Rutherford Discovery Fellow, 2022